

Module G:

Child Nutrition

Table of Contents

Overview	1
Growth & Development.....	2
Feeding Children.....	4
Feeding Recommendations.....	12
Nutrition-Related Problems & Solutions.....	17
Hazards.....	21
Parenting.....	27
Indicators of Nutritional Need.....	30
Summary	47
Glossary	49
Progress Check	51
Learning Activities	54
1: Stages of Early Childhood.....	55
2: Parenting Tips.....	57
3: Discussion of Child Nutrition Issues.....	63
4: Observations.....	65
5: Case Studies.....	67
6: Role Plays.....	73
Progress Check Answers	75

Overview

Introduction

This module will help you understand the nutritional needs of children 1 to 5 years of age.

Learning Objectives

After completing this module the Nutrition Assistant will be able to:

- describe normal growth* and development of children 1 to 5 years old;
 - list factors that influence growth and appetite for toddlers and pre-schoolers;
 - describe feeding guidelines for children, including self-feeding, division of responsibility, and food safety;
 - describe common nutrition-related problems for children and identify solutions to these problems;
 - describe choking, lead poisoning, and poison hazards for children and identify prevention or solutions for each;
 - describe general principles of good parenting;
 - identify indicators of nutritional need and specify conditions for a child's WIC eligibility;
 - in a case study situation, assess a child's growth pattern, biochemical, clinical and dietary status, and
 - in a role-play situation, interview the caregiver of a child, assess the child's nutritional status, prioritize needs and provide individual education.
-

** Words that you may not know are **underlined**. Definitions for these words can be found in the **Glossary** at the end of the module. (Note: Words are only underlined the first few times they appear in the text.)*

Growth & Development

Growth

Growth is an increase in the physical size of the body.

Development

Development is the process of learning new skills or maturing.

Normal Growth & Development

A child's growth and appetite **decrease** at around one year of age. Between 1 and 5 years growth is slow and steady, but not as fast as during infancy.

What Influences Growth?

A child's growth is influenced by:

- genetics,
 - hormones,
 - environment, and
 - behavior.
-

Stages

Children go through several stages of development as they grow. These stages involve physical, mental, and social changes. The chart on the next pages lists and describes this development from age 1 to 5.

Use the chart as a guide. Remember: not every child develops at the same pace. Each child has her/his own normal pattern of growth.

Learning Activity 1

To learn more about the stages of childhood you may want to try **Learning Activity 1** found at the end of this module.

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Growth & Development (continued)

Stages of Childhood for 1 – 5 Years of Age

Age	Description
12-15 months	<ul style="list-style-type: none"> • Walks alone • Begins to climb stairs and to run • Starts pretending • Sings • Says several words • Follows simple commands • Gets first molars • Can use a spoon and cup
15-18 months	<ul style="list-style-type: none"> • Walks backwards and in circles • Dances • Scribbles • Says 10-20 words • Makes first sentence • Likes to use fingers to eat
18-24 months	<ul style="list-style-type: none"> • Jumps • Follows 2-step commands • Draws circles and lines • Says 20-50 words • Makes 3 word sentences • Uses cup well • Has favorite foods
24-36 months	<ul style="list-style-type: none"> • Gets last primary teeth • Feeds self with spills • Uses fork
36-48 months	<ul style="list-style-type: none"> • Can feed self more easily • Can chew most foods
48-60 months	<ul style="list-style-type: none"> • Likes to talk while eating • Influenced by peers • Likes to help prepare foods • Can use a knife

Feeding Children

Development that Influences Feeding

A child's eating behaviors are influenced by the development of:

- teeth,
- coordination skills, and
- independent behaviors.

Feeding Guidelines

When feeding children, parents/caregivers should be aware of:

- self-feeding,
- division of responsibility, and
- food safety.

Self-Feeding

As children grow and mature, their coordination and feeding skills improve. They go from eating with their fingers to eating with silverware and drinking from a cup.

To support self-feeding:

- Let child regulate her/his food intake.
 - Model appropriate eating behaviors.
 - Provide healthy meals and snacks.
 - Provide appropriate eating utensils.
 - Establish eating times and location(s).
-

Division of Responsibility

Parent(s)/caregiver(s) and children are responsible for feeding.

The chart on the next few pages lists the responsibilities of the child and those of the parent/caregiver.

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Feeding Children (continued)

Food Safety

We cannot tell if food is safe just by looking and smelling it. Thus, people who prepare food for children need to be careful when shopping and preparing foods.

To make sure food is safe for children, use the Food Safety Guidelines on the next page.

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Feeding Children (continued)

Food Safety Guidelines

Buying Foods:

- Do not buy:
 - dented or bulging cans,
 - torn or damaged packages,
 - jars with cracks or loose lids, and/or
 - baby foods with the safety button popped up.
- Check expiration dates of all foods.

Storing Foods:

- **In the pantry/kitchen cupboards:**
 - Store canned foods in a cool place (between 0° and 70° F) and away from sunlight.
 - Store foods such as flour and sugar in airtight containers to prevent bugs from getting in.
- **In the refrigerator:**
 - Keep refrigerator temperature at 40° F or below.
 - Refrigerate foods as soon as possible. Do not keep foods out for more than 2 hours.
- **In the freezer:**
 - Keep freezer at 0° F or below.
 - Store food in airtight containers.
- Throw out partially eaten foods.
- After cooking, directly refrigerate foods do NOT leave them on counters to cool.
- If in doubt, throw it out!

Preparing Foods:

- Wash hands with soap and water before preparing foods.
- Clean counters, cutting boards, and sinks with hot water and soap before preparing food.
- Do not use foods after the expiration date.
- Keep raw meat and meat juices away from other foods.
- Thaw meats in a refrigerator or use a microwave.
- Thoroughly cook meat until the center is no longer pink and meat juice is clear. **Do not feed raw or undercooked meats.**
- Keep hot foods hot.

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Feeding Children (continued)

Division of Responsibility in Feeding Children

Child's Role:
1. Decides how much to eat. A child's food intake will match her/his needs. How much a child eats is up to the child.
2. Decide what is eaten. Young children like: <ul style="list-style-type: none">• simple meals with food separated from each other,• finger foods,• foods with bright colors and varied shapes Young children often do NOT like: <ul style="list-style-type: none">• highly seasoned food, and/or• new foods.
3. Decide if s/he will eat. A young child will eat only if s/he wants to eat. S/he cannot be forced to eat.

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Feeding Children (continued)

Division of Responsibility in Feeding Children (continued)

Parent/Caregiver Role:**1. Select and buy nutritious food.**

Buy foods from the 5 food groups (Fruits, Vegetables, Grains, Milk, and Protein).

2. Make and offer nutritious meals.

Make meals that contain food from each of the 5 food groups (Fruits, Vegetables, Grains, Milk, and Protein).

3. Make and offer nutritious snacks.

Make snacks that contain 1 or more of the 5 food groups such as fruit juice, a raw fruit, whole grain cereal, crackers, bread, yogurt, cheese, cottage cheese, milk, or a hard-boiled egg.

Offer snacks 1½ to 2 hours before or after a meal. (Young children need to eat every 2 to 4 hours.)

Give small amounts that do not spoil the child's appetite for meals.

Do NOT give foods such as chips, fruit drinks, or candy as snacks. These have little nutritional value. Offer them only occasionally.

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Feeding Children (continued)

Division of Responsibility in Feeding Children (continued)

Parent/Caregiver Role (continued):

4. Give the child food s/he can handle.

Offer meals and snacks in **child-size portions**. (Too much food can overwhelm a child.)

Cut food into bite-size pieces.

Do NOT offer foods that are round, hard, or could easily slide down a child's throat and cause choking.

Cool hot foods before serving.

Use salt, sugar, pepper and spices in moderation.

5. Decide when meals and snacks are offered.

Meals and snacks should be offered on a regular time schedule. This gives the child a sense of security.

Time meals and snacks so that the child eats every 1½ to 2 hours.

6. Insist the child be present at meals.

Expect all family members to be present for meals.

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Feeding Children (continued)

Division of Responsibility in Feeding Children (continued)

Parent/Caregiver Role (continued):

7. Model appropriate eating behaviors.

Focus attention on the food being eaten.

Sit down while eating.

Eat in only 1 or 2 places in the house.

Do NOT:

- have books or toys at the table,
- watch TV while eating,
- force the child to “clean her/his plate”,
- bribe or reward the child to eat, and/or
- use food as a reward.

8. Reinforce appropriate eating behaviors and ignore inappropriate behaviors.

Pay attention to, recognize, and praise appropriate eating behaviors.

Ignore negative behavior. When parents/caregivers respond to negative behaviors the child gets the attention s/he wants and the negative behavior is actually supported.

Do NOT make special meals (“short-order cook”) for the child if s/he does not like what is served. (The child will not starve; a nutritious snack is only a few hours away!)

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Feeding Children (continued)

Division of Responsibility in Feeding Children (continued)

Parent/Caregiver Role (continued):

9. Make family meal times pleasant.

Provide comfortable seating for meals. For young children, use a high chair or sturdy chair that allows the child to sit at the proper height to the table.

Provide easy-to-use utensils such as:

- spoons and forks with short, straight handles and blunt tips,
- small, wide-mouthed cups with wide handles,
- plastic bowls,
- dishes with low edges to help the child scoop up food, and/or
- divided plates with compartments to keep foods separated.

Avoid having arguments or scolding during meals.

Feeding Recommendations

What to Eat

A child will usually take in the right amount of food, but s/he will not know which foods are best for good health.

Parents and caregivers should offer children nutritious foods.

Use the Food Guide Pyramid

Use the Food Guide Pyramid to show parents/caregivers what foods and how much of those foods children should be offered.

Food Guide Pyramid

The Food Guide Pyramid on the next page shows the recommended number of servings for children 1 to 5 year old.

Serving Sizes

Serving sizes for children depend on the **age** of the child.

Serving Size Charts

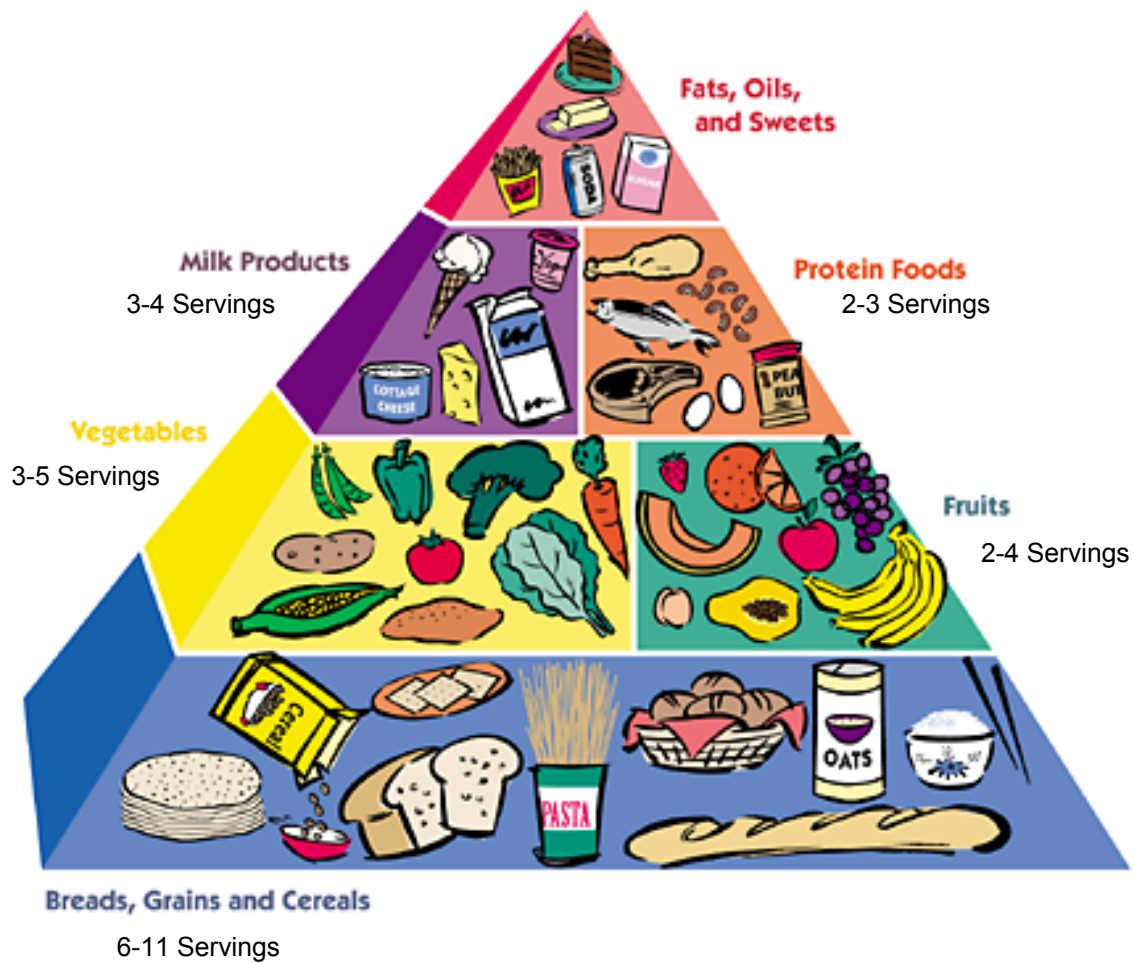
Two charts describing serving sizes for:

- 1 to 3 year olds and
- 4 to 5 year olds

follow the Food Guide Pyramid.

Feeding Recommendations (continued)

Food Guide Pyramid- Children 1 to 5 Years Old



Feeding Recommendations (continued)

Food Group Serving Size Chart for Children 1 to 3 years old

Food Group/Food	1 serving is about:
Grains	
Bread, tortilla, roll, muffin, pancake, waffle	$\frac{1}{2}$
Dry cereal	$\frac{1}{4}$ to $\frac{1}{2}$ cup
Noodles, rice, cooked cereal	$\frac{1}{4}$ to $\frac{1}{3}$ cup
Crackers	2 to 4 small
Vegetables	
Cooked or raw	2 to 3 Tablespoons
Fruits	
Fresh	$\frac{1}{4}$ to $\frac{1}{2}$ small
Canned or frozen	2 to 3 Tablespoons
Juice	$\frac{1}{2}$ cup
Milk	
Milk or breast milk	$\frac{1}{2}$ cup
Cheese	$\frac{3}{4}$ ounce
Cottage cheese	1 cup
Yogurt, pudding or custard made with milk	$\frac{1}{2}$ cup
Frozen yogurt, ice cream	$\frac{3}{4}$ cup
Protein	
Meat, chicken, turkey, fish	1 ounce
Egg	1
Cooked dry beans, lentils, tofu	$\frac{1}{3}$ cup
Peanut butter	1 Tablespoon

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Feeding Recommendations (continued)

Food Group Serving Size Chart for Children 4 to 5 years old

Food Group/Food	1 serving is about:
Grains	
Bread, tortilla, roll, muffin, pancake, waffle	1
Dry cereal	$\frac{1}{2}$ to $\frac{3}{4}$ cup
Noodles, rice, cooked cereal	$\frac{1}{3}$ TO $\frac{1}{2}$ cup
Crackers	6 small
Vegetables	
Cooked or raw	$\frac{1}{3}$ to $\frac{1}{2}$ cup
Fruits	
Fresh	$\frac{1}{2}$ to 1 small
Canned or frozen	$\frac{1}{3}$ to $\frac{1}{2}$ cup
Juice	$\frac{3}{4}$ cup
Milk	
Milk or breast milk	$\frac{3}{4}$ cup
Cheese	1 ounce
Yogurt, pudding or custard made with milk	$\frac{3}{4}$ cup
Protein	
Meat, chicken, turkey, fish	1 $\frac{1}{2}$ ounces
Egg	1
Cooked dry beans, lentils, tofu	$\frac{1}{2}$ cup
Peanut butter	2 Tablespoons

Nutrition-Related Problems & Solutions

Nutrition-Related Problems

There are several common nutrition-related problems for children. These are:

- anemia,
- constipation,
- dental problems,
- overweight,
- short stature, and
- underweight.

Become familiar with these problems so that you can help parents/caregivers identify solutions.

Chart of Nutrition-Related Problems & Solutions

The chart on the next few pages lists some common nutrition-related problems for children and possible solutions.

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Nutrition-Related Problems & Solutions (continued)

Common Problems & Solutions

Problem	Solution(s)
<p>Anemia (low iron levels in blood) may cause problems such as poor appetite, tiredness, weakness, developmental delays, learning problems, and growth retardation.</p>	<div data-bbox="764 552 1393 667" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Refer to Registered Dietitian if: Hgb <10g/dl or Hct <30%.</p> </div> <ul style="list-style-type: none"> • Offer iron-rich foods (such as iron-fortified cereals and beans) along with Vitamin C rich foods (such as orange juice, tomatoes, and broccoli). Vitamin C helps the body with iron absorption. • Cook foods in cast iron cookware. • Avoid excess intake of dairy products since they are low in iron.
<p>Constipation (less often than usual or difficult bowel movements) may be due to:</p> <ul style="list-style-type: none"> • being tired, • anxiety, • medications, and/or • inappropriate diet. 	<ul style="list-style-type: none"> • Add more fiber to the diet, by offering whole grain breads/cereals, fruits, dried beans/peas, and vegetables. • Give the child plenty of fluids, especially water. • Avoid foods high in sugar or low in fiber. • Encourage the child to play actively. • Have regular meal times. • Help the child use the toilet regularly. • Do NOT hurry bowel movements.

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Nutrition-Related Problems & Solutions (continued)

Common Problems & Solutions

Problem	Solution(s)
<p>Dental Problems such as <u>baby bottle tooth decay</u> or other tooth decay</p>	<ul style="list-style-type: none"> • Wean child from bottle at about 12 months. • Get child interested in something other than a bottle at bedtime. • Only put breast milk, formula or water in the bottle. • Put water in bedtime bottle instead of milk. • Give snacks that “scrub” the teeth like apple slices, carrot sticks and/or celery sticks. <i>(Note: children under 4 can choke on such foods as raw carrots.)</i> • Do NOT allow the child to eat continuously throughout the day. • Brush child’s teeth regularly. • Ask doctor about fluoride if family does NOT live in fluoridated water area. • Do NOT give sticky and sugary snacks such as raisins or candy.

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Nutrition-Related Problems & Solutions (continued)

Common Problems & Solutions

Problem	Solution(s)
<p>Overweight (90-98th percentile weight for height) may be due to:</p> <ul style="list-style-type: none"> • overeating, • lack of exercise, • social and/or emotional factors, • slower than normal metabolism, and/or • genetics. 	<div data-bbox="764 533 1393 667" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Refer to Registered Dietitian if:</p> <ul style="list-style-type: none"> • >98th percentile and • ≥ 3 years old. </div> <ul style="list-style-type: none"> • Have child eat nutritiously: <ul style="list-style-type: none"> ➢ Offer 3-4 low-fat milk products/day (non-fat or 1% milk for children ≥ 2 years old). ➢ Offer low-fat protein foods. ➢ Offer high-fiber fruits and vegetables. ➢ Offer nutritious, low-fat snacks (such as fruit, vegetables, yogurt). ➢ Offer water for thirst. ➢ If eating “fast foods”, choose low-fat foods and limit quantities. • Encourage child to be physically active. • Limit activities such as TV watching and video game playing. • Use food appropriately. <ul style="list-style-type: none"> ➢ Schedule snack and meal times. ➢ Let child decide how much to eat. ➢ Have child feed self when ready. ➢ Do NOT put child on low-calorie diet. • Do NOT focus on child’s looks or pressure child to be thin. • Do NOT expect child to lose weight.

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Nutrition-Related Problems & Solutions (continued)

Common Problems & Solutions (continued)

Problem	Solution(s)
Short Stature (length/height for age less than the 10 th percentile)	<ul style="list-style-type: none"> • Be aware of parent's stature. (If parents are relatively short, child may also be short.) • Check growth measurements for at least 1 year. • Encourage good nutrition.
Underweight (weight for length/height less than the 10 th percentile)	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p><i>Refer to Registered Dietitian if child's weight for length/height is \leq 10th percentile</i></p> </div> <ul style="list-style-type: none"> • Encourage an appropriate and nutritious diet for the child. • Add calorie-dense foods to the diet. • Encourage frequent meals and snacks where appropriate.

Hazards

Hazards

There are several hazards that can cause serious problems in children. These hazards include:

- choking,
- lead poisoning, and
- other hazards.

Hazards Chart

The chart on the next 2 pages lists these hazards and ways to prevent or avoid them.

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Hazards (continued)

Hazards & Suggestions for Prevention

Hazard	Suggestions for Prevention
Choking especially among children 1 to 2 years old (by age 3, children are much less likely to choke)	<ul style="list-style-type: none">• Cut hot dogs and meat sticks into 4 long strips.• Cut round foods such as grapes and cherries in half and remove seeds.• Have children sit while eating.• Watch children while they eat.• Remove bones from meats.• Do NOT:<ul style="list-style-type: none">➤ give hard foods such as raw carrots, nuts, popcorn and hard candy;➤ give sticky foods such as peanut butter or soft bread;➤ give foods such as marshmallows (they can swell in the throat), and/or➤ allow children to run or play while eating.

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Hazards (continued)

Hazards & Suggestions for Prevention

Hazard	Suggestions for Prevention
Lead Poisoning (breathing or ingesting lead)	<div data-bbox="706 493 1339 630" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <i>Refer to Registered Dietitian if child's blood lead level $\geq 10\text{mcg/dl}$ within past 12 months.</i> </div> <ul style="list-style-type: none"> • Do NOT: <ul style="list-style-type: none"> ➤ put cribs, high chairs, and/or beds near peeling or chipping paint areas; ➤ sand, burn or scrape paint that may contain lead where children are present; ➤ use home remedies or cosmetics that contain lead (such as Azarcon, Greta, Pay-loo-a, Alkohl or Kohl); ➤ use hand-made or imported dishes for serving, preparing or storing food; and/or ➤ store food in plastic grocery produce bags or bread wrappers turned inside out (writing on these bags may contain lead). • Do: <ul style="list-style-type: none"> ➤ Avoid hobbies that use lead (such as stained glass work). ➤ Have children wash hands before eating. ➤ Wet mop floors often to keep them dust-free. ➤ Take off shoes before entering the house. ➤ Give your child enough calcium, iron, and protein and avoid fatty foods. (This helps prevent lead absorption.)

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Hazards (continued)

Hazards & Suggestions for Prevention (continued)

Hazard	Suggestions for Prevention
Other	<ul style="list-style-type: none"> • Lock all cabinets that contain medicines, household cleaning agents, pesticides and/or any other chemicals. • Keep sharp items (such as knives, scissors, razor blades) out of reach of children. • To prevent drowning: <ul style="list-style-type: none"> ➤ Keep toilet bowls closed. ➤ Empty buckets of water. ➤ Lock gates to swimming pools. ➤ Never leave children alone near lakes, rivers, or swimming pools. • Cover electrical outlets with appropriate covers. • Take cords or strings out of jacket or sweater hoods. (They can catch on playground equipment and strangle the child.) • Do NOT: <ul style="list-style-type: none"> ➤ hang anything around the child's neck (such as a string that holds a pacifier) ➤ allow children to play with ropes, dog leashes, cords from window blinds, and/or other strangulation hazards. • Buckle the child into a properly installed car seat every time s/he rides in a car. • Call the Poison Control Center or 9-1-1, if a child does take in a poisonous substance or has a life-threatening accident/emergency.

Parenting

Definition

Parenting is the raising of children, especially the nurturing, caring, loving, and guiding given to them.

Importance

Parenting is important in shaping our children. Our children will become the leaders, workers, teachers, parents, and caregivers of the future.

General Principles

This section will give you some general principles for good parenting. You may use these principles to help guide parent(s)/caregiver(s) of the children you serve.

There are many resources available that describe how to be a good parent. You may also want to read some of these to get more information about good parenting.

Chart of General Principles

The chart on the next few pages lists and describes 8 parenting principles.

Learning Activity 2

To learn more about the parenting principles you may want to try **Learning Activity 2** found at the end of this module.

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Parenting (continued)

8 Parenting Principles

Principle	Description
1. Set a Good Example	<ul style="list-style-type: none"> Model appropriate behaviors. Children learn by imitating their parent(s)/ caregiver(s). <p><i>For example, if a parent screams when something does not go well, the child may do the same when things do not go well.</i></p>
2. Be Affectionate	<ul style="list-style-type: none"> Give children physical affection such as hugs and kisses. Give verbal affection by saying such things as, “You are wonderful.” Or “I love you.”
3. Praise Good Behavior	<ul style="list-style-type: none"> Compliment children when they behave appropriately (“catch them being good”). <p><i>For example, if a child says “thank you” when getting a snack, praise her/him by saying something such as “I really like that you said ‘thank you’ to me just now.”</i></p>
4. Establish Clear and Specific Rules	<ul style="list-style-type: none"> Establish rules that are reasonable. Make sure the child understands the rules: what is acceptable and unacceptable behavior. Explain what will happen if a rule is not followed.

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Parenting (continued)

8 Parenting Principles (continued)

Principle	Description
5. <u>Discipline</u> with Respect	<ul style="list-style-type: none"> • When the child behaves inappropriately, follow-up immediately with the consequence, • Use a matter-of-fact approach. • Be consistent. Reward or punish a behavior in the same way as much as possible.
6. Be Inclusive	<ul style="list-style-type: none"> • Include the child in daily activities. (Children enjoy being “helpers” and learn from these experiences.) • Spend time talking to, reading to, and playing with the child. <p><i>For example, have the child help fold the laundry, wash the car, or prepare a meal.</i></p>
7. Be a Good Listener	<ul style="list-style-type: none"> • Help the child express her/his feelings. • Listen carefully to what the child says and try to see things from her/his point of view. • Do not interrupt the child. • Ask open-ended questions. <p><i>For example, if a child looks upset, say, “You look upset. It’s okay to feel upset. What happened?”</i></p>

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Parenting (continued)

8 Parenting Principles (continued)

Principle	Description
8. Be Safe	<ul style="list-style-type: none">• Always know where the child is and what s/he may be doing.• Childproof the home of the child.• Always buckle the child in an infant or child car seat when s/he is a passenger in a car.• Never leave a child alone in a car.• Never shake a baby. Shaking can cause brain damage and death.

Indicators of Nutritional Need

Charts of Indicators of Nutritional Need

The 4 charts on the following pages list and describe the anthropometric, biochemical, clinical, and dietary indicators of nutritional need that make children eligible for WIC, with their corresponding ISIS codes and levels of nutrition intervention.

Learning Activity 3, 4, or 5

To learn more about how to provide nutrition education to a parent/caregiver of a child you may want to try **Learning Activity 3**, **Learning Activity 4**, or **Learning Activity 5** found at the end of this module.

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Indicators of Nutritional Need (continued)

Anthropometric Indicators

Indicator	Description	ISIS Code	Level
Very Underweight	Less than 5 th percentile weight for length/ height (based on CDC growth charts)	A10	4
Underweight	5 th – 10 th percentile weight for length/ height (based on CDC growth charts)	A11	2
Overweight	90 th – 98 th percentile weight for length/ height (based on CDC growth charts)	A21	2
Very Overweight	Greater than 98 th percentile weight for length/height (based on CDC growth charts) for children < 3 years old	A22	2
Very Overweight	Greater than 98 th percentile weight for length/height (based on CDC growth charts) for children ≥ 3 years old	A23	3
Short Stature	Less than or equal 10 th percentile height for age (based on CDC growth charts)	A31	1
Low Birth Weight	Less than or equal to 5 pounds 8 ounces (or 2,500 grams) for children less than 24 months	A50	2
Inadequate Growth	Children to 59 months of age who have inadequate growth	A62	3

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Indicators of Nutritional Need (continued)

Anthropometric Indicators (continued)

Indicator	Description	ISIS Code	Level
Small for Gestational Age (SGA)	Less than 10 th percentile weight for gestational age (based on intrauterine growth reference) for children less than 24 months	A92	2

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Indicators of Nutritional Need (continued)

Biochemical Indicators

Indicator	Description	ISIS Code	Level
Low Hemoglobin/ Hematocrit	<ul style="list-style-type: none"> Hemoglobin level (Hgb) from 10-10.9 g/dl <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Hematocrit level (Hct) from 30-32.9 % 	B12	2
Very Low Hemoglobin/ Hematocrit	<ul style="list-style-type: none"> Hemoglobin level (Hgb) less than 10 g/dl <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Hematocrit level (Hct) less than 30 % 	B13	3
Other Congenital Blood Disorders	<ul style="list-style-type: none"> Hereditary conditions that cause physical or metabolic abnormality Condition must alter nutritional status metabolically and/or mechanically Examples include sickle cell anemia and thalassemia major 	B90	4
Lead Poisoning	Blood lead level greater than or equal to 10 mcg/dl within past 12 months	B92	4

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Indicators of Nutritional Need (continued)

Clinical Indicators

Indicator	Description	ISIS Code	Level
Recent Major Surgery or Trauma	Recent surgery or trauma severe enough to affect nutritional status: <ul style="list-style-type: none"> • within past 2 months self-reported OR <ul style="list-style-type: none"> • greater than 2 months if there is continued need for nutritional support diagnosed by a physician. 	C51	3
Active TB	Tuberculosis within the past 6 months	C52	4
Severe Acute Infections	Severe acute infections within past 6 months that affect nutritional status, such as: <ul style="list-style-type: none"> • encephalitis, • hepatitis, • pneumonia, • meningitis, and • parasites. 	C53	3
Recent Burns	Recent burns that affect nutritional status.	C54	3
Severe Dental Problems	Dental problems that impair the ability to ingest adequate quantity or quality of foods such as: <ul style="list-style-type: none"> • nursing or baby bottle caries or • tooth loss. 	C57	2

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Drug Exposure In Utero	Child that has: <ul style="list-style-type: none"> • fetal alcohol syndrome, • positive toxicology screen, • drug withdrawal, or • mother that used alcohol or drugs during most recent pregnancy. 	C60	3
CNS Disorders	Central Nervous System Disorders that affect energy requirements and ability to feed self such as: <ul style="list-style-type: none"> • epilepsy, • cerebral palsy, • neural tube defects such as spina bifida. 	C70	4
Down's Syndrome	Down's Syndrome where condition alters nutritional status metabolically and/or mechanically	C71	4
Developmental, Sensory, or Motor Delays	Developmental, sensory, or motor delays that interfere with the ability to eat, chew or swallow food. May include: <ul style="list-style-type: none"> • mental retardation, • birth injury, • head trauma, • minimal brain function, • feeding problems due to developmental delays, • brain damage. 	C72	4

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Cystic Fibrosis	Cystic fibrosis where condition or treatment affects nutritional status	C73	4
Congenital Heart Disease	Congenital heart disease where condition or treatment affects nutritional status	C74	4
Congenital GI Disorders	Congenital gastrointestinal disorders that interfere with intake or absorption of nutrients and affects nutritional status such as: <ul style="list-style-type: none"> • tracheal-esophageal fistula, • esophageal atresia, • gastroschisis, • intestinal atresia, • short bowel syndrome. 	C75	4
Congenital Facial Malformation	Congenital facial malformation that causes physical abnormality that affects nutritional status such as cleft lip or cleft palate.	C76	4
Other Genetic & Congenital Disorders	Other genetic and congenital disorders that cause physical or metabolic abnormality and affect nutritional status such as: <ul style="list-style-type: none"> • thalassemia major, • sickle cell anemia. 	C77	4

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Gastrointestinal Disorders	Gastrointestinal disorders where condition or treatment affects nutritional status such as: <ul style="list-style-type: none"> • stomach or intestinal disorders, • small bowel enterocolitis, • malabsorption syndrome, • liver disease, or • gall bladder disease. 	C80	4
Cardiovascular Diseases	Cardiovascular diseases where condition or treatment affects nutritional status	C81	4
Immunodeficiency or Chronic Infections	Immunodeficiency or chronic infections that affect nutritional status such as: <ul style="list-style-type: none"> • hepatitis, • HIV infection, or • Acquired Immune Deficiency Syndrome (AIDS) 	C82	4
Cancer	Cancer where condition or treatment affects nutritional status	C83	4
Hypertension	High blood pressure	C84	4
Diabetes Mellitus	Diabetes mellitus Type 1 or 2.	C85	4
Renal Disease	Kidney disease such as: <ul style="list-style-type: none"> • pyelonephritis or • persistent proteinuria 	C86	4

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Inborn Errors of Metabolism	Gene mutations or gene deletions that alter metabolism in the body such as: <ul style="list-style-type: none"> • phenylketonuria (PKU), • maple syrup urine disease, • galactosemia, • homocystinuria, • tyrosinemia, • histidinemia, • urea cycle disorders, • glutaric aciduria, • methylmalonic acidemia, • glycogen storage disease, • galactokinase deficiency, • fructoaldolase deficiency, • propionic acidemia, or • hypermethionemia. 	C87	4
Food Allergies	Has adverse immune response or hypersensitivity to a food that causes immunologic reaction	C89	4
Homeless	Child lacks a fixed, regular nighttime residence; or has residence in a shelter, institution for temporary residence, the residence of another individual used for temporary accommodation, or a place not designed or usually used for accommodating people.	C91	2

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Abused/ Neglected	Within the past 6 months, has been at imminent risk of serious harm, death, serious physical or emotional harm or exploitation.	C93	2
Migrant	Member of a family where within the past 24 months, at least 1 individual has worked in agriculture on a seasonal basis and has a temporary home for this work.	C98	1
Entering Foster Care	Within past 6 months, infant: <ul style="list-style-type: none"> • entered foster care OR • moved from one foster care home to another 	C99	2
Nutrient Deficiency Diseases	Diagnosis of a nutritional deficiency or disease caused by insufficient dietary intake of nutrients such as: <ul style="list-style-type: none"> • protein energy malnutrition (PEM), • scurvy, • rickets, • beri beri, • hypocalcemia, • osteomalacia, • Vitamin K deficiency, • pellagra, • cheilosis, • Menkes disease, or • xerophthalmia. 	C100	4

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Thyroid Disorders	Hypothyroid or hyperthyroid conditions	C102	4
Hypoglycemia	Low blood sugar level	C104	4
Drug Nutrient Interactions	Use of drugs or medications that interfere with nutrient intake or utilization, such that nutritional status is affected	C107	4
Inadequate Vitamin/Mineral Supplementation	Child not routinely taking recommended dietary supplementation	C108	2
Inappropriate/ Excessive Intake of Supplements	Inappropriate or excessive intake of unprescribed vitamins, minerals, and/or herbal remedies	C109	3
Failure to Thrive	Child not thriving	C110	4
Lactose Intolerance	Child has insufficient production of the enzyme lactase causing inability to digest lactose	C111	2
Depression	Child is diagnosed by a physician or self-reported by applicant/participant/ caregiver	C113	3

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Pica	Child has current or recent craving for or ingestion of non-food, non-ice items such as: <ul style="list-style-type: none"> • clay, • laundry or corn starch, • dirt, • ashes, • paint chips, • baking soda. 	C117	4
Pica: Ice	Child eats large quantities of ice	C118	2
Primary Caregiver Has Limited Ability to Make Feeding Decisions &/or Prepare Food	Child has primary caregiver who has limited ability to make feeding decisions and/or prepare food. Includes individuals who are: <ul style="list-style-type: none"> • 17 years old and younger; • mentally disabled/delayed; • clinically depressed; • physically disabled to a degree that restricts or limits food preparation abilities • currently using or have history of abusing alcohol/drugs 	C121	3
Persistent Asthma	Persistent asthma requiring daily medications and severe enough to affect nutritional status	C122	3

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Indicators of Nutritional Need (continued)

Clinical Indicators (continued)

Indicator	Description	ISIS Code	Level
Other Medical Diseases or Conditions	Medical diseases or conditions severe enough to affect nutritional status such as: <ul style="list-style-type: none">• juvenile rheumatoid arthritis and• lupus erythematosus	C123	4

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Indicators of Nutritional Need (continued)

Dietary Indicators

Indicator	Description	ISIS Code	Level
Low Intake	Typical daily intake of less than the minimum number of servings from one or more of the food groups	D10	1
Low Vitamin A	Typical daily intake of less than the minimum number of servings	D11	1
Low Vitamin C	Typical daily intake of less than the minimum number of servings	D12	1
Low Fruits/ Vegetables	Typical daily intake of less than the minimum number of servings	D13	1
Low Breads/Grains /Cereals	Typical daily intake of less than the minimum number of servings	D14	1
Low Milk	Typical daily intake of less than the minimum number of servings	D15	1
Low Protein	Typical daily intake of less than the minimum number of servings	D16	1
Low Fluid	Low fluid intake as determined by nutritionist/dietitian	D18	1
Low Fiber	Low fiber intake as determined by nutritionist/dietitian	D19	1
Low Iron	Low iron intake as determined by nutritionist/dietitian	D20	1

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Indicators of Nutritional Need (continued)

Dietary Indicators (continued)

Indicator	Description	ISIS Code	Level
Inappropriate Feeding Practices	<p>Routine consumption or feeding of:</p> <ul style="list-style-type: none"> • 12 ounces or more of juice or juice drinks, • non-fat or reduced fat milk as primary milk source to children 12-24 months of age, • foods low in essential nutrients and high in calories that replace foods needed for growth and development for children 12-24 months of age, and/or • foods of inappropriate size, shape or consistency that put children under 4 years of age at risk of choking. <p>Routinely:</p> <ul style="list-style-type: none"> • forcing a child to eat certain types or amounts of foods, • ignoring a child's requests for appropriate foods, • restricting a child's ability to consume nutritious meals at an appropriate frequency each day, • not supporting a child's need for self feeding, • feeding/offering primarily pureed or liquid food when s/he is ready for eating solid foods. 	D95	2

Indicators of Nutritional Need (continued)

Dietary Indicators (continued)

Indicator	Description	ISIS Code	Level
Inappropriate Use of Baby Bottles	Inappropriate use of baby bottles such as: <ul style="list-style-type: none"> • using bottles for liquids other than breast milk, formula or water and/or • using bottles beyond 14 months of age. 	D96	2
Vegan or Highly Restrictive Diets	Consuming a diet: <ul style="list-style-type: none"> • of plant origin foods only, • low in calories, or • that limits intake of nutrients. 	D100	4

Indicators of Nutritional Need (continued)

Other Indicators

Indicator	Description	ISIS Code	Level
Possibility of Regression	Possibility of regression for a risk that was identified in a previous certification.	N10 – N13	1
Transfer	Transfer	N20	1

Summary

Growth

A child's growth is influenced by:

- genetics,
 - hormones,
 - environment, and
 - behavior.
-

Stages of Growth & Development

The chart below lists some key stages of childhood for children 1 to 5 years of age.

Age (Years)	Stage (Ability to:)
1-2	Walk and Stand Talk Eat table foods
2-3	Walk, run, jump Talk a lot Self feed
3-4	Talk in sentences Self feed easily Chew most foods
4-5	Use a knife Able to prepare some foods Influenced by peers Begin to write

Common Nutrition-Related Problems

Common nutrition-related problems for children include:

- anemia,
 - constipation,
 - dental problems,
 - overweight,
 - short stature, and
 - underweight.
-

continued on next page

Summary (continued)

Feeding Practices

When feeding children parents/caregivers should be aware of:

- self-feeding,
 - division of responsibility, and
 - food safety.
-

Hazards

Choking, lead poisoning, as well as several other hazards can cause serious problems to children.

Principles of Good Parenting

The following 8 principles help facilitate good parenting:

- Set a good example.
 - Be affectionate.
 - Praise good behavior.
 - Establish clear and specific rules.
 - Discipline with respect.
 - Be inclusive.
 - Be a good listener.
 - Be safe.
-

Indicators of Nutritional Need

There are many indicators of nutritional need that make a child eligible for WIC. These include anthropometric, biochemical, clinical, and dietary indicators.

Glossary

anemia- Anemia is a condition in which the blood is low in iron.

anthropometric indicator- An anthropometric indicator is information about a person's body measurements such as height, weight, and circumference of the head, waist, arms or legs.

biochemical indicator- A biochemical indicator is information about a person's blood or urine such as hemoglobin (Hgb), hematocrit (Hct), blood sugar, and blood lead levels.

case study- A case study is a description of a person or situation that is studied to decide on the best plan of action.

clinical indicator- A clinical indicator is information about a person's health history and present medical conditions.

constipation- Constipation is bowel movements that are difficult or less frequent than usual.

development- Development is the process of maturing.

dietary indicator- A dietary indicator is information about a person's eating behaviors.

discipline- Training of a child that corrects inappropriate behaviors and supports appropriate behaviors.

genetics- Genetics is a person's inherited characteristics, such as eye/hair color, body build, and height.

growth- Growth is the increase in the physical size of the body.

lead poisoning- Lead poisoning is the breathing or ingestion of lead.

nutritional need- Nutritional need is a health problem or condition that puts a person at nutritional risk.

role play- A role play is when 2 or more people act out a scene as though it was "real life". "Props" such as baby dolls or food models are not needed but may be helpful.

Glossary (continued)

short stature- Short stature is height or length for age that is below the 10th percentile on the growth chart.

Progress Check

1. Name at least 3 factors that affect the growth and development of a young child.
2. Match the ages to the stages of development.

<u>Stage</u>		<u>Age (months)</u>
Says first sentence.	A	12 -15
Plays with others.	B	15 -18
Follows 2-step commands.	C	18 – 24
Begins to walk.	D	24 - 36
Able to chew most foods.	E	36 – 48
Influenced by peers.	F	48 - 60

Progress Check (continued)

3. Fill in the chart below - For each of the food groups listed, write in the range of servings recommended for children 1-5 years old.

Food Group	1-5 Year Old
Bread, Grains, Cereals	
Vegetables	
Fruits	
Milk Products	
Protein Foods	

4. Match the nutrition-related problem with a possible solution.

<u>Problem</u>	<u>Solution</u>
_____ Anemia	A Do NOT give a bottle with milk at bedtime.
_____ Constipation	B Give foods high in iron and Vitamin C.
_____ Dental Problems	C Refer to Nutritionist for follow-up.
_____ Overweight	D Increase the amount of fiber in the diet.
_____ Short Stature	E Increase physical activity.
_____ Underweight	F Check parents' stature.

Progress Check (continued)

5. Mark the following as “TRUE” or “FALSE”.

- _____ The parent/caregiver is responsible for the amount of food the child eats.
- _____ The child is responsible for whether or not s/he eats.
- _____ The parent/caregiver should encourage the child to “clean her/his plate”.
- _____ Children usually need to eat every 3 to 5 hours.
- _____ Grapes are a suitable snack for young children if they are cut and their seeds removed.
- _____ Provide meals that contain food from each of the food groups.

6. Put a check mark (✓) before each item that may result in a child getting lead poisoning.

- _____ Licking lead-based paint off of a windowsill.
- _____ Drinking out of a hand-painted cup.
- _____ Cooking with a cast-iron skillet.
- _____ Eating fresh fruits and vegetables.
- _____ Breathing the dust created from sanding paint.

Progress Check (continued)

7. List 5 principles of good parenting.

8. Identify the following indicators of nutritional need for a child. Write in “A” for anthropometric, “B” for biochemical, “C” for clinical, and “D” for dietary.

_____ lactose intolerance

_____ overweight

_____ very low hemoglobin/hematocrit

_____ low Vitamin C intake

_____ lead poisoning

Learning Activities

The following activities are included and are recommended for interactive learning:

- Learning Activity 1: Stages of Early Childhood
- Learning Activity 2: Parenting Tips
- Learning Activity 3: Discussion of Child Nutrition Issues
- Learning Activity 4: Observations
- Learning Activity 5: Case Studies
- Learning Activity 6: Role Plays

Activity 1: Stages of Early Childhood

Learning Objectives After completing this activity, the Nutrition Assistant will be able to:

- describe the normal growth and development stages of children 1 to 5 years of age.

Instructions

1. Make arrangements with your supervisor or mentor to observe several toddlers and pre-schoolers in the waiting room area of your WIC site.
2. Observe these toddlers and pre-schoolers as they play and interact with others.
3. Using your observations and what you have learned, fill in the chart on the next page. You may also wish to use the chart on page 3 to guide you.
4. When you are finished, discuss your findings with your mentor or supervisor.

Activity 1: Stages of Early Childhood

Age	Description
1 – 2 Years	
2 –3 Years	
3 – 4 Years	
4 - 5 Years	

Activity 2: Parenting Tips

- Learning Objectives** After completing this activity, the Nutrition Assistant will be able to:
- Provide some basic parenting tips to parents/caregivers of children.

- Instructions**
1. Read each of the 5 situations described on the following pages.
 2. Identify the problem the parent/caregiver is having and write it down.
 3. Suggest a possible parenting tip that may help the parent/caregiver.
 4. Talk to your supervisor or mentor if you need help.
 5. When you are finished, discuss your responses with your supervisor or mentor.

Activity 2: Parenting Tips

Situation 1:

Estella's first-born child, Rosa is 13 months old. She has just been nursed and burped and begins to cry.

Estella tells you this happens often. She says she does not want to spoil Rosa, so she lets her cry. Some days she cannot stand the crying and picks Rosa up and yells, "Stop that!" She says she sometimes shakes Rosa to get some "sense into her".

Problem(s):

Suggestions/Tips:

Activity 2: Parenting Tips (continued)**Situation 2:**

Derrick is 30 months old. He does not like taking a bath and usually screams when one of his parents puts him in the tub.

His mother tells you she rarely gives him a bath because she feels she has no control over him. She said she tried again last week and he settled down as soon as she told him she would read him a story after his bath. She said that once she had got him out of the tub and dressed, she was too tired to read the story.

Problem(s):**Suggestions/Tips:**

Activity 2: Parenting Tips (continued)**Situation 3:**

Morgan is almost 5 years old. She enjoys coloring in her coloring books. When she sees her 8-year-old sister color she becomes frustrated and starts to scream and kick. She wants to be able to “color just as good” as her sister.

Morgan’s father says he does not know what to do with her when she gets upset. He says Morgan’s mother often screams at the girls when she is frustrated.

Problem(s):**Suggestions/Tips:**

Activity 2: Parenting Tips (continued)**Situation 4:**

Sean is 4 years old. He has a 3 year-old brother, Anthony. When Sean sees his brother do something wrong he often hits him and says, “you are a bad boy!”

Sean and Anthony’s mother says that she “disciplines” her boys often. When they do not do as she tells them, she “gives them a good spanking.” She says she does not understand why Sean feels the need to hit his younger brother so often.

Problem(s):**Suggestions/Tips:**

Activity 2: Parenting Tips (continued)**Situation 5:**

Tyla is 2 years old. She usually does not eat much for dinner. Tyla's caregiver has been worried about Tyla's eating behavior. For about 2 months she has been making Tyla a special meal of sausage and eggs for dinner so she will eat.

Joan, Tyla's mother, says that Tyla recently stopped eating the sausage and now wants only ice cream.

Problem(s):**Suggestions/Tips:**

Activity 3: Discussion of Child Nutrition Issues

Learning Objectives After completing this activity, the Nutrition Assistant will:

- be familiar with some of the child nutrition issues in WIC.

Instructions

1. Have your supervisor or mentor arrange for you to spend about 1 hour with a WIC staff person.
2. Ask the staff person to discuss her/his experiences with child nutrition issues at WIC.
3. Ask such questions as:
 - *What child nutrition problems seem to be most common among the participants you see?*
 - *What are some common indicators of nutritional need for children?*
 - *What are some difficulties you have had in assessing a child's nutritional status?*
 - *What suggestions do you have that would help a new staff person be ready to address the needs of children?*
4. Write down your notes on the next page.
5. When you are finished, discuss your findings with your supervisor.

Activity 3: Discussion of Child Nutrition Issues

Notes:

Activity 4: Observations

Learning Objectives

After completing this activity, the Nutrition Assistant will be able to explain how to:

- interview the parent/caregiver of a child,
- assess a child's nutritional status,
- prioritize needs, and
- provide individual education.

Instructions

1. Have your mentor or supervisor arrange for you to observe several individual nutrition education sessions with the parent/caregiver of a child.

2. Observe the staff person as s/he:
- assesses the child's needs/problems,
 - prioritizes these needs/problems, and
 - provides individual education.

(Make sure to observe how participants needing different levels of intervention (Levels 1-4) are handled in your agency.)

3. Write down your notes on the next page.

4. Discuss your observations with your mentor or supervisor.

5. Write down your notes on the next page.

Activity 4: Observations

Notes:

Activity 5: Case Studies

- Learning Objectives** After completing this activity, the Nutrition Assistant will be able to:
- assess a child's growth pattern, and
 - assess the child's biochemical, clinical, and dietary status.

- Instructions**
1. Read each of the 5 case studies on the following pages.
 2. Identify the child's anthropometric, biochemical, clinical, and dietary status.
 3. Fill out the form following each case study.
 4. Talk to your supervisor or mentor if you need help.
 5. When you are finished, discuss your responses with your supervisor or mentor.

Activity 5: Case Studies

Case Study 1:

Roberto is 18 months old. The following information is available about him:

- He was 8 pounds at birth.
- He is now 35 inches long.
- He now weighs 29 pounds.
- His hemoglobin is 11.6 g/dl.
- He is no longer being breastfed.
- His diet includes iron-fortified formula from a bottle and some solid foods.
- He also gets soda in a bottle.
- He has some tooth decay.

Assessment:

What are his **anthropometric** risks?

What are his **biochemical** risks?

What are his **clinical** risks?

What are his **dietary** risks?

Activity 5: Case Studies (continued)

Case Study 2:

Victor is 4 years old. The following information is available about him:

- He was 5 pounds at birth.
- He is now 41 inches tall.
- He now weighs 33.5 pounds.
- His hemoglobin is 10.1 g/dl.
- He drinks about 8 ounces of milk at every meal and a total of about 24 ounces between meals.
- He eats some vegetables, but no iron-rich protein foods or fruit.

Assessment:

What are his **anthropometric** risks?

What are his **biochemical** risks?

What are his **clinical** risks?

What are his **dietary** risks?

Activity 5: Case Studies (continued)

Case Study 3:

Maya is 3 years old. The following information is available about her:

- She was 7 pounds, 6 ounces at birth.
- She is now 36 inches tall.
- She now weighs 42 pounds.
- Her hemoglobin is 12 g/dl.
- She often has chips as a snack.
- Her mother says she often allows Maya to watch TV while she takes care of the household.

Assessment:

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

Activity 5: Case Studies (continued)

Case Study 4:

Maggie is 2 years and 3 months old. The following information is available about her:

- She was 8 pounds at birth.
- She is now 34 inches long.
- She now weighs 30 pounds.
- Her hemoglobin is 13.2 g/dl.
- She has been eating solid foods since she turned 7 months old.
- She has been living in a homeless shelter for the last 2 months.

Assessment:

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

Activity 5: Case Studies (continued)

Case Study 5:

Carlie is 13 months old. The following information is available about her:

- She was 7 pounds, 2 ounces at birth.
- She now is 29 inches long.
- She now weighs 22.5 pounds.
- Her hemoglobin is 11.8 g/dl.
- She is being fed iron-fortified formula.
- She also eats such solid foods as hot dogs and popcorn.
- Her mother says, "I usually don't cut up her food since she already has a lot of teeth."

Assessment:

What are her **anthropometric** risks?

What are her **biochemical** risks?

What are her **clinical** risks?

What are her **dietary** risks?

Activity 6: Role Plays

Learning Objectives After completing this activity the Nutrition Assistant will be able to:

- interview the parent/caregiver of an child,
- assess a child's nutritional status,
- prioritize the child's needs, and
- provide individual education to the parent/caregiver of a child.

Background A role play is a scenario in which 2 or more people act out a scene as though it was "real life". Props are not needed but may be helpful.

Instructions

1. Ask your mentor, supervisor, or a co-worker to role play any 3 of the 5 roles (A-E) described on the following page.
2. Using the information you have learned about child nutrition, act out the role of a WIC Nutrition Assistant in a session with these 3 parents/caregivers.
3. Mentor/Supervisor/Co-Worker: Using the role plays as your guide, act out the role of the participant. Try to be as realistic as possible.
4. After each session, ask your co-worker to tell you what s/he noticed. Make sure to ask for your strengths as well as weaknesses.

Activity 6: Role Plays

5 Participants

Role Play A Elizabeth Moore's daughter Bethany is 15 months old. She weighs 19 pounds and is 30.5 inches long. She has a hemoglobin of 11 g/dl and a hematocrit of 34%. She was breastfed until she was placed with a foster care family 2 months ago.

Role Play B Linda Nguyen's son Andrew is 23 months old. Andrew's weight is at the 8th percentile for length. He has a hemoglobin of 10.8 g/dl and a hematocrit of 34%. He is no longer being breastfed. He eats a lot of white rice, few vegetables, and does not eat much protein. He drinks non-fat milk and some fruit juices.

Role Play C Rosemarie Garcia's daughter Michelle is 3 years old. Michelle's weight is at the 50th percentile for height. Michelle often has constipation.

Role Play D Robert Cole's son Jacob is 4 years old. Jacob is a rather "picky eater." His father says he "doesn't like vegetables".

Role Play E Patricia Cox's daughter Patrice is 2 years old. Patrice refuses to drink any milk.

Progress Check Answers

1. Name at least 3 factors that affect the growth and development of a young child.

Any 3 of the following responses are correct:

- ***genetics,***
- ***hormones,***
- ***environment, and***
- ***behavior.***

2. Match the ages to the stages of development.

<u>Stage</u>	<u>Age (months)</u>
<u>B</u> Says first sentence.	A 12 -15
<u>D</u> Plays with others.	B 15 -18
<u>C</u> Follows 2-step commands.	C 18 – 24
<u>A</u> Begins to walk.	D 24 - 36
<u>E</u> Able to chew most foods.	E 36 – 48
<u>F</u> Influenced by peers.	F 48 - 60

Progress Check Answers (continued)

3. Fill in the chart below - For each of the food groups listed, write in the range of servings recommended for children 1-5 years old.

Food Group	1-5 Year Old
Bread, Grains, Cereals	6-11
Vegetables	3-5
Fruits	2-4
Milk Products	3-4
Protein Foods	2-3

4. Match the nutrition-related problem with a possible solution.

<u>Problem</u>	<u>Solution</u>
<u>B</u> Anemia	A Do NOT give a bottle with milk at bedtime.
<u>D</u> Constipation	B Give foods high in iron and Vitamin C.
<u>A</u> Dental Problems	C Refer to Nutritionist for follow-up.
<u>E</u> Overweight	D Increase the amount of fiber in the diet.
<u>F</u> Short Stature	E Increase physical activity.
<u>C</u> Underweight	F Check parents' stature.

Progress Check Answers (continued)

5. Mark the following as “TRUE” or “FALSE”.

FALSE The parent/caregiver is responsible for the amount of food the child eats.

TRUE The child is responsible for whether or not s/he eats.

FALSE The parent/caregiver should encourage the child to “clean her/his plate”.

FALSE Children usually need to eat every 3 to 5 hours.

TRUE Grapes are a suitable snack for young children if they are cut and their seeds removed.

TRUE Provide meals that contain food from each of the food groups.

6. Put a check mark (✓) before each item that may result in a child getting lead poisoning.

☒ Licking lead-based paint off of a windowsill.

☒ Drinking out of a hand-painted cup.

☐ Cooking with a cast-iron skillet.

☐ Eating fresh fruits and vegetables.

☒ Breathing the dust created from sanding paint.

Progress Check Answers (continued)

7. List 5 principles of good parenting.

Any 5 of the following responses are correct:

- ***Set a good example.***
- ***Be affectionate.***
- ***Praise good behavior.***
- ***Establish clear and specific rules.***
- ***Discipline with respect.***
- ***Be inclusive.***
- ***Be a good listener.***
- ***Keep a watchful eye.***

8. Identify the following indicators of nutritional need for a child. Write in “A” for anthropometric, “B” for biochemical, “C” for clinical, and “D” for dietary.

 C lactose intolerance

 A overweight

 B very low hemoglobin/hematocrit

 D low Vitamin C intake

 B lead poisoning